

**RECEIVED
CENTRAL FAX CENTER**Application No. 09/670,424
Response to Office Action**DEC 21 2005**

Customer No. 01933

row). However, for the data segments in categories weight, height and phone, each row in the database is encrypted with a respective row key (i.e. the data segments in the weight, height and phone categories are encrypted with the key "tiger" in row 1, with the key "dog" in row 2 and with the key "cat" in row 3).

It is respectfully submitted that the above described features of the present invention are clearly and explicitly recited in each of independent claims 30, 40 and 41.

As recited in amended independent claim 30, moreover, when one of the data segment groups (identified by an item category title) is to be searched, the data set including a search process condition is encrypted using the corresponding column key, and the data segment group is searched with the encrypted data set.

Re: Claims 33, 34, 37, 39 and 42

According to the present invention as recited in each of independent claims 33, 34, 37, 39 and 42, a database is provided which is made up of data segments organized in rows and in columns. The columns of data segment groups are identified by item category titles, as described above with respect to independent claims 30, 40 and 41.

The database recited in independent claims 33, 34, 37, 39 and 42 is encrypted based on whether data segments correspond to item category titles of a first kind (corresponding to data

Application No. 09/670,424
Response to Office Action

Customer No. 01933

segment groups that are to be easily searchable, such as name, state and age as described above) or item category titles of a second kind (such as weight, height and phone as described above). The data segment groups corresponding to the first kind of item category titles are encrypted using a column key (which can be a respective column key for each data segment group/category title), and the data segment groups corresponding to the second kind of item category titles are encrypted in units of rows using respective row keys, in a similar manner to the encryption process described above with respect to independent claims 30, 40 and 41.

Re: The Present Invention versus the Cited References

As explained hereinabove, the data segments of the database according to the present invention are organized into categories identified by item category titles, and the type of encryption (encryption using a column key for all data segments in a category or encryption using a different row key for each row to encrypt certain data segments in the row) performed on the data segments depends on the category to which the data segment belongs.

It is respectfully submitted that none of the cited prior art references disclose, teach or suggest this feature of the claimed present invention.

Application No. 09/670,424
Response to Office Action

Customer No. 01933

That is, Goldstein discloses a database than can be encrypted and searched in encrypted form, and Taguchi et al discloses that encryption keys are determined in accordance with attributes of the data to be encrypted, wherein the attributes are, for example, data addresses, address regions, virtual addresses and segments.

It is respectfully submitted, however, that neither the disclosure of a database searchable in encrypted form nor the disclosure of changing keys in accordance with data attributes corresponds to a database organized as according to the claimed present invention as described above, whereby a type of encryption - with a same column key for a data segment group, or row by row using respective row keys - to be used is decided for each data segment group of a plurality of encrypted data segment groups in accordance with a category (item category title) of the data segment group.

In view of the foregoing, it is respectfully submitted that the present invention as recited in each of independent claims 30, 33, 34, 37 and 39-42, as well as each of claims 31, 32, 35, 36 and 38 respectively depending therefrom, clearly patentably distinguishes over the combination of Goldstein and Taguchi et al under 35 USC 103.

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Application No. 09/670,424
Response to Office Action

Customer No. 01933

Entry of this Amendment, allowance of the claims and the passing of this application to issue are respectfully solicited.

If the Examiner has any comments, questions, objections or recommendations, the Examiner is invited to telephone the undersigned for prompt action.

Respectfully submitted,

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